Colorado Integrated Communications Network

Converging technologies today for the possibilities of tomorrow

CICN CLIENT PACKAGE

A Guide to Assist Agencies Plan for Implementation

April 2008, Revision 1

DPA
Department of Personnel & Administration
Good Government Starts Here

DoIT
Division of Information Technologies

Colorado Integrated Communications Network

Converging technologies today for the possibilities of tomorrow

CICN Client Package

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DOCUMENT PURPOSE

This document is provided to help agencies plan and prepare for the upcoming conversion of their current phone system to the new VoIP-based phones. Topics in this document include:

- Deployment Activities and Timelines
- FAQs for both Technical Personnel and End Users
- The Selected Phone Models
- Post Implementation End User Support

THIS DOCUMENT IS SUBJECT TO REVISION

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DEPLOYMENT ACTIVITIES

Conversions are done by Task Orders that have been developed by the CICN project team. Among other things, the Task Order includes the physical location(s) to be converted. Once the Task Order (TO) is developed, your agency's involvement is required in a number of activities that take place prior to and during the implementation.

NOTE: For cost and efficiency reasons, Task Orders are developed to implement physical locations in their entirety. This means that agencies with multiple locations may not receive their phones in the same timeframe/task order. Your agency will not lose the ability to communicate within or outside of their agency or any telephony functionality.

Timeline of Major Activities

Please note:

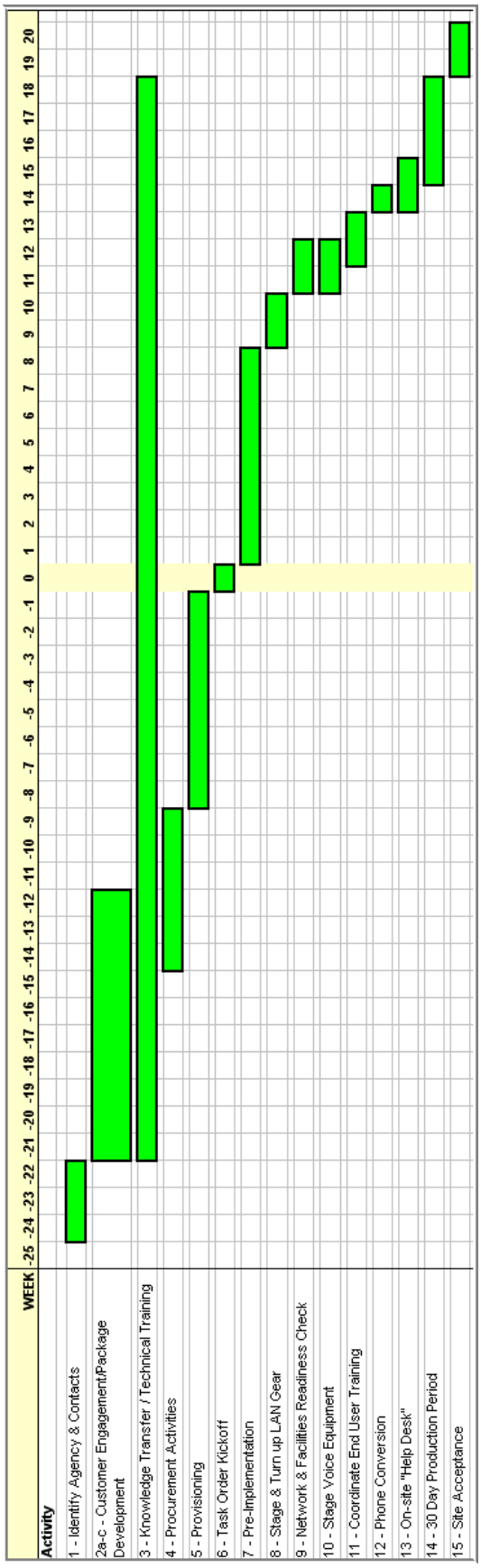
The following timelines are estimates only; the actual timelines will vary from site to site and implementation.

- Some activities will be performed concurrently with other Task Orders.

Activity	Those Involved	Activity Timeframe (approximate)
1. Identify Agency and Contacts Agency identifies and provides the CICN Project Manager with the names of: ▪ Main point of contact / project lead ▪ Technical point of contact (network/LAN administrator) ▪ Telephone liaison at each site ▪ Business Ops point of contact ▪ Agency Decision Maker (someone who can authorize budgetary decisions) Note: Some of these roles may overlap Provide agency with CICN project contacts	Agency Contacts CICN Project PM and/or CICN Project Lead	Begins 24 weeks prior to the Task Order Kickoff Should not take more than two (2) weeks to complete
2. Customer Engagement / Package Development **(a) Customer Engagement** ▪ Final site survey and validation Validate the original Site Survey / Equipment Inventory completed in 2006 in order to create the Bill of Materials (BOM) (includes a walkthrough) ▪ Obtain floor plans from agency ▪ Identify any miscellaneous wiring issues, resources, electrical/UPS, rack, etc. ▪ Notify agency that a "freeze" period will need to be established later after which no system-related changes can occur outside of what has been identified (network, systems)	Agency CICN Project Lead DoIT Telecom ISC PM ISC Engineering Team	Begins 21 weeks prior to the Task Order Kickoff 10 weeks to complete

Activity	Those Involved	Activity Timeframe (approximate)
(b) Engage Call Center vendor, if applicable **(c) Package Development** ▪ Finalize BOM ▪ Develop Statement of Work (SOW) ▪ Agency review and approval of BOM and SOW ▪ ISC delivers package to CICN Project Manager	 Agency CICN Project PM CICN Project Lead ISC PM ISC Technical	
3. Knowledge Transfer / Technical Training This on-going activity includes having a technical person from the agency work with ISC as we deploy the switch, test data connections, and test the phone sets and features	Agency Project Team ISC	Begins 21 weeks prior to the Task Order Kickoff meeting and continues through the remainder of the project lifecycle
4. Procurement Activities ▪ Create PRF, TO Letter, Contract Amendment (if necessary), Bi-Lateral Change Order (BCOL), Lease Schedules ▪ Obtain Signatures	CICN Project PM CICN Project Lead ISC PM DPA and Agency Procurement	Begins 14 weeks prior to Task Order Kickoff 6 weeks to complete
5. **Provisioning**, including: ▪ Ordering ▪ Shipping ▪ Receiving ▪ Inventory	CICN Project PM CICN Project Lead ISC PM ISC Engineering Team CICN Project Team	8 weeks prior to Task Order Kickoff 8 weeks to complete
6. Task Order Kickoff This is generally a meeting that includes the following discussion topics: ▪ Explain what the customer can expect from this point forward - roles and responsibilities, timelines, etc. ▪ Schedule pre-implementation interviews ▪ Schedule weekly project meeting	Agency CICN Project Team	This is “ground zero” for all activity timelines
7. Pre-Implementation ▪ Pre-stage equipment (unbox, configure and test equipment) ▪ Phone features meeting (see “The Bat File” section in this document and interview sample) ▪ Address any security and building access issues	Agency DoIT Telecom ISC PM	Begins the week following Task Order Kickoff 8 weeks to complete
8. Stage and Turn Up LAN Gear ▪ Deliver equipment to agency ▪ Rack equipment	Agency LAN Admin DoIT Network Services DoIT Voice Services	Begins 9 weeks after Task Order Kickoff

Activity	Those Involved	Activity Timeframe (approximate)
▪ Data cut (scheduled)	ISC	2 weeks to complete
9. **Network & Facilities Readiness Check** (QOS Testing) ▪ Install and execute network readiness software	Agency LAN Admin DoIT Network Services DoIT Voice Services ISC	Begins 11 weeks after Task Order Kickoff 2 weeks to complete
10. Stage Voice Equipment ▪ New phones built and staged according to final floor plan ▪ Phones may be stored on-site or at DoIT Voice Services until conversion	Agency DoIT Voice Services ISC	Begins 11 weeks after Task Order Kickoff and occurs in the same timeframe as the Network & Facilities Readiness Check 2 weeks to complete
11. Coordinate End User Training Work with agency rep to schedule training dates and location.	Agency CICN PM DoIT Telecom	Begins 12 weeks after Task Order Kickoff Training occurs no more than two (2) weeks prior to phone conversion 2 weeks to complete
12. Phone Conversion! Remove existing phones, install new phones, test	Agency CICN PM DoIT Telecom DoIT Network ISC	Begins 14 weeks after Task Order Kickoff 1 week to complete
13. **On-site "help desk"** on day one ▪ CICN Project team and/or DoIT voice services members on-site the first day to assist with any questions or problems ▪ End users to call DoIT Service Center at 303.239.HELP for all support issues from day one and going forward (See "Post Implementation Support" section of this document)		Begins the day after the phones are installed; generally 14 weeks after Task Order Kickoff
14. 30 Day Production Period This period may include fine-tuning the LAN for QOS (Quality of Service) and other performance metrics	Agency CICN PM DoIT Telecom ISC Technical Team	Begins immediately following phone conversion; generally 15 weeks after Task Order Kickoff 30 days to complete
15. Site Acceptance The site is formally transferred from a project phase to "operational" when DoIT and the agency are satisfied that any issues have been resolved and that the phones and network are working properly	Agency CICN PM DoIT Telecom ISC PM	Begins 19 weeks after Task Order Kickoff 30 day production period begins at conversion. Site acceptance occurs when all parties are satisfied with the implementation.


WEEK
-25 -24 -23 -22 -21 -20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Activity
1 - Identify Agency & Contacts
2a-c - Customer Engagement/Package Development
3 - Knowledge Transfer / Technical Training
4 - Procurement Activities
5 - Provisioning
6 - Task Order Kickoff
7 - Pre-Implementation
8 - Stage & Turn up LAN Gear
9 - Network & Facilities Readiness Check
10 - Stage Voice Equipment
11 - Coordinate End User Training
12 - Phone Conversion
13 - On-site "Help Desk"
14 - 30 Day Production Period
15 - Site Acceptance

Example of Pre-Implementation Interview Discussion Items

In the Pre-Implementation phase, one of the activities is to conduct an interview with the agency to obtain information about the client environment. The actual questions may vary but at a minimum, the following topics will be discussed.

Building Security – any building access restrictions, issues, etc.

Business Requirements – for instance, compliance requirements with federal regulations or policies such as HIPAA, etc.

Functional Requirements i.e. "receptionist" phones, auto-attendants, IVRs, etc.

Call Center Requirements, if applicable (see also "A Note About Call Centers and IVRs)

Technical Requirements

Cutover Requirements – For example, do you prefer for the cut over to the new system occur during or after business hours? What are core business hours, etc?

Begin thinking about the phone features each and every phone will need (i.e. part of a hunt group, voice messaging, cover paths, intercom, etc.)

A Note About Call Centers and IVRs

This document is not intended to address call centers except to state that the CICN project is not simply about replacing phones. For example, it includes upgrades to the network and developing a statewide call center/IVR infrastructure. Agencies are encouraged to contact the project team to discuss their specific needs and timelines for existing or new call center services and applications to enable the CICN project team to prioritize your needs accordingly. Please be aware, however, that due to the limited time and resources it is unlikely that we will be able to act upon these request until such time that all agencies have been converted to the new voice system and the phone sets have been deployed.

THE SELECTED PHONE MODELS

The following three phone models were selected for this project:

- Cisco Unified IP Phone 7911G
- Cisco Unified IP Phone 7941G
- Cisco Unified IP Phone 7961G

Note: the Cisco 7961GE will be added later in the project.

Each of the models come with an on-line Help feature, voice mail indicators, soft key buttons (the actual number of which varies from model to model), volume control, a choice of multiple ring tones, and a graphical display. The decision on which model will installed is based on end-user functional requirements and the agency LAN environment. For example, those who need only a few features will receive the 7911G model and those requiring multiple functions, such as executive administrative assistants and call center employees, will likely receive the 7961G model.

On-line, interactive training tutorials for each of these phones and their respective features can be found as follows:

7911G http://www.cisco.com/comm/applications/CCNP/qlm/7911/
7941G http://www.cisco.com/comm/applications/CCNP/qlm/7941/index.htm
7961G http://www.cisco.com/comm/applications/CCNP/qlm/7961/index.htm

7911G

7941G

7961G

THE "BAT" FILE

Prior to implementation, the project team needs to know phone-by-phone, line-by-line, what features need to be programmed into each phone. A member of the project team will meet with you to determine what features need to be assigned to each phone and will store the information in what is called a "Bat" file.

Helpful hint to prepare for this meeting: Have a copy of a current floor plan and a list of all telephone numbers, extensions, and analog lines[1].

Phone Features

Note: This list was obtained from the Cisco website. Not all features are currently in use by DoIT customers today however if there is interest, features may be added to our services at a later date.

Feature	Description
Abbreviated dialing	Allows users to speed dial a phone number by entering an assigned index code (1 - 99) on the phone keypad. Users assign index codes from the Cisco Unified CM User Options web pages.
Audible Message Waiting Indicator	A stutter tone from the handset, headset, or speakerphone indicates that a user has one or more new voice messages on a line. **Note:** The stutter tone is line-specific. You hear in only when using the line with waiting messages.
Auto Answer	Connects incoming calls automatically after a ring or two. Auto Answer works with either the speakerphone or headset.
Auto-pickup	Allows a user to use one-touch, pickup functionality for call pickup, group call pickup, and other group call pickup.
Barge	Allows a user to join a non-private call on a shared phone line. Barge features include cBarge and Barge. • Barge adds a user to a call and converts it into a conference, allowing the user and other parties to access conference features. • Barge adds a user to a call but does not convert the call into a conference. The phones support Barge in two conference modes: • Built-in conference bridge at the target device (the phone that is being barged). This mode uses the **Barge** softkey.

[1] Analog lines will most likely be those lines associated with fax machines, credit card machines, conference room phones, modems, fire alarms or equipment monitoring systems.

Feature	Description
	• Shared conference bridge. This mode uses the **cBarge** softkey. **Note:** This feature may not be available depending on how you configure the phone.
Block external to external transfer	Prevents users from transferring an external call to another external number.
Busy Lamp Field (BLF) speed dial	Allows a user to monitor the call state of a directory number (DN) that is associated with a speed-dial button.
Call display restrictions	Determines the information that will display for calling or connected lines, depending on the parties who are involved in the call.
Call forward	Allows users to redirect incoming calls to another number.
Call forward configurable display	Allows you to specify information that appears on a phone when a call is forwarded. This information can include the caller name, caller number, redirected number, and original dialed number.
Call forward destination override	Allows you to override Call Forward All (CFA) in cases where the CFA target places a call to the CFA initiator. This allows the CFA target to reach the CFA initiator for important calls. The override works whether the CFA target phone number is internal or external.
Call park	Allows users to park (temporarily store) a call and then retrieve the call by using another phone in the Cisco Unified Communications Manager system.
Call pickup	Allows users to redirect a call that is ringing on another phone within their pickup group to their phone. You can configure an audio and/or visual alert for the primary line on the phone. This alert notifies the users that a call is ringing in their pickup group.
Call Recording	Allows a supervisor to record an active call. The user might hear an intermittent tone (beep tone) during a call when it is being recorded. **Note**: The intercom feature is disabled when a call is being monitored or recorded.
Call waiting	Indicates (and allows users to answer) an incoming call that rings while on another call. Displays incoming call information on the

Feature	Description
	phone screen.
Caller ID	Displays caller identification such as a phone number, name, or other descriptive text on the phone screen.
Cisco Call Back	Provides users with an audio and visual alert on the phone when a busy or unavailable party becomes available.
Client matter codes (CMC)	Enables a user to specify that a call relates to a specific client matter.
Conference	• Allows a user to talk simultaneously with multiple parties by calling each participant individually. Conference features include Conference, cBarge, and Meet-Me. • Allows a non-controller in a standard (ad hoc) conference to add or remove participants; also allows any conference participant to join together two standard conferences on the same line.
Directed Call Park	Allows a user to transfer an active call to an available directed call park number that the user dials or speed dials.
Do Not Disturb (DND)	When DND is turned on, no audible rings occur during the ringing-in state of a call. You can configure the phone to have a softkey template with a DND softkey or a phone-button template with DND as one of the selected features. The following DND-related parameters are configurable in Cisco Unified Communications Manager administration: • Do Not Disturb—Allows you to enable DND on a per-phone basis. From Cisco Unified Communications Manager Administration, choose **Device > Phone > Phone Configuration**. • DND Incoming Call Alert—Choose the type of alert to play on a phone for incoming calls when DND is active. This parameter is located on both the Common Phone Profile page and the Phone configuration page (Phone page value takes precedence). • Include DND In BLF Status—Enables DND status to override busy/idle state.
Extension Mobility Service	Allows a user temporarily to apply a phone number and user profile settings to a shared Cisco Unified IP Phone by logging into

Feature	Description
	the Extension Mobility service on that phone. Extension Mobility can be useful if users work from a variety of locations within a company or if they share a workspace with coworkers.
Fast Dial Service	Allows a user to enter a Fast Dial code to place a call. Fast Dial codes can be assigned to phone numbers or Personal Address Book entries. (See "Services" in this table.)
Forced authorization codes (FAC)	Controls the types of calls that certain users can place.
Group call pickup	Allows a user to answer a call ringing on a phone in another group by using a group pickup code.
Hold	Allows users to move connected calls from an active state to a held state.
Hold Reversion	Limits the amount of time that a call can be on hold before reverting to the phone that put the call on hold and alerting the user. Reverting calls are distinguished from incoming calls by a single ring (or beep, depending on the new call indicator setting for the line). This notification repeats at intervals if not resumed. A call that triggers Hold Reversion also displays an animated icon in the call bubble and a brief message on the status line. You can configure call focus priority to favor incoming or reverting calls.
Hunt Group	Provides load sharing for calls to a main directory number. A hunt group contains a series of directory numbers that can answer the incoming calls. When the first directory number in the hunt group is busy, the system hunts in a predetermined sequence for the next available directory number in the group and directs the call to that phone.
Immediate Divert	Allows users to transfer incoming calls directly to the voice messaging system.
Immediate Divert— Enhanced	Allows users to transfer incoming calls directly to their voice messaging system or to the voice messaging system of the original called party.

Feature	Description
Intercom	Allows users to place and receive intercom calls using programmable phone buttons. You can configure intercom line buttons to: • Directly dial a specific intercom extension. • Initiate an intercom call and then prompt the user to enter a valid intercom number.
Log out of hunt group	Allows users to log out of a hunt group and to temporarily block calls from ringing their phones when they are not available to take calls. Logging out of hunt groups does not prevent non-hunt group calls from ringing their phone.
Malicious caller identification (MCID)	Allows users to notify the system administrator about suspicious calls that are received.
Meet-Me conference	Allows a user to host a Meet-Me conference in which other participants call a predetermined number at a scheduled time.
Message waiting indicator	A light on the handset that indicates that indicates that a user has one or more new voice messages.
Mobile Connect	Enables users to manage business calls using a single phone number and pick up in-progress calls on the desktop phone and a remote device such as a cellular phone.
Mobile Voice Access	Extends Mobile Connect capabilities by allowing users to access an interactive voice response (IVR) system to originate a call from a remote device such as a cellular phone.
Multilevel Precedence and Preemption (MLPP)	Provides a method of prioritizing calls within your phone system. Use this feature when users work in an environment where they need to make and receive urgent or critical calls.
Music-on- hold	Plays music while callers are on hold.
Onhook call transfer	Allows a user to press the **Transfer** button and then go onhook to complete a call transfer.
Other group pickup	Allows a user to answer a call ringing on a phone in another group that is associated with the user's group. (See also "Call pickup" and "Group call pickup" in this table.)
Privacy	Prevents users who share a line from adding themselves to a call

Feature	Description
	and from viewing information on their phone screens about the other user's call. **Note:** This feature may not be available, depending on how you configure the phone
Quality Reporting Tool (QRT)	Allows users to use the **QRT** softkey on a phone to submit information about problem phone calls. QRT can be configured for either of two user modes, depending upon the amount of user interaction desired with QRT. **Note:** This feature may not be available, depending on how you configure the phone.
Redial	Allows users to call the most recently dialed phone number by pressing the **Redial** button.
Ring setting	Identifies ring type used for a line when a phone has another active call.
Silent Monitoring	Allows a supervisor to silently monitor an active call. The supervisor cannot be heard by either party on the call. The user might hear an intermittent tone (beep tone) during a call when it is being monitored. **Note:** The intercom feature is disabled when a call is being monitored or recorded.
Services	Allows you to use the Cisco Unified IP Phone Services Configuration menu in Cisco Unified Communications Manager Administration to define and maintain the list of phone services to which users can subscribe.
Services URL button	Allows users to access services from a programmable button rather than by using the Services menu on a phone.
Shared line	Allows a user to have multiple phones that share the same phone number or allows a user to share a phone number with a coworker.
Speed-dialing	Dials a specified number that has been previously stored.
Time-of-Day Routing	Restricts access to specified telephony features by time period.
Transfer	Allows users to redirect connected calls from their phones to another number by pressing the **Transfer** button.

Feature	Description
Video support	Enable video support on the phone.
Voice messaging system	Enables callers to leave messages if calls are unanswered.

FREQUENTLY ASKED QUESTIONS FOR AGENCY TECHNICAL PERSONNEL

WHAT DOES IT MEAN WHEN THE PROJECT TEAM USES THE PHRASE "LIKE FOR LIKE"?

This phrase was used in earlier project phases to describe the budgetary aspect of this project to reflect DoITs desire to provide the same services and features that it does today without any increase in cost to the agencies.

AFTER IMPLEMENTATION, WHO IS RESPONSIBLE FOR THE AGENCY'S LAN – DOIT OR THE AGENCY?

Agencies will continue to be responsible for their own LANs just as they are today. Whatever entity is currently responsible for an Agency's LAN will continue in that role. However, there will be a higher level of collaboration required between the agency and DoIT for the purpose of troubleshooting, diagnostic work and adding new phones to the environment.

SINCE THE TELEPHONE AND DATA SYSTEMS WILL BE CONVERGED ONTO ONE NETWORK, WHO IS RESPONSIBLE FOR ORDERING NEW DATA CIRCUITS WHEN NEEDED?

Agencies will continue to be responsible for their own data circuit needs and therefore it will be up to each agency to order new data circuits. Existing procedures will remain in place.

WHAT TELEPHONE SUPPORT RESPONSIBILITIES WILL I HAVE POST-IMPLEMENTATION?

The responsibilities that you have today most likely will not change. There will be need for more collaboration and cooperation with regard to making changes within the environment and resolving break/fix issues within the environment.

WILL I RECEIVE TRAINING?

DoIT will provide knowledge transfer training to appropriate technical personnel and will involve those persons in pre-implementation activities such as the Agency's main point of contact, project lead, technical point of contact (network/LAN administrator), telephone liaison at each site, and business operations point of contact. If desired, agencies can purchase additional training.

WHO IS RESPONSIBLE FOR ADMINISTERING THE CALL MANAGER?

DoIT

HOW WILL MOVES, ADDS AND CHANGES BE HANDLED IN THE NEW ENVIRONMENT?

Adds and changes to the Call Manager will continue to be processed by using a Voice Services order form. Moves can be completed by the agency without DoIT involvement as long as no changes to the Call Manager or LAN environment is required.

How does E911 work in the CICN environment?

One of the benefits of the new architecture is that the jack and not the telephone number identifies the location of the telephone. DoIT will be using *Cisco Emergency Responder* which dynamically polls the ports and updates its database to reflect what phones are on what ports at any given time. This information is then pushed to a third-party database such as Intrado, which in the current environment must be manually updated. However, the wiring moves from the wall jack to the switch port must be tightly controlled.

ARE WE LIMITED TO THE PHONE MODELS DOIT HAS SELECTED?

Not necessarily. Job need, job function and LAN environment determine the type of phone an end-user will receive. If an agency determines that they prefer a model other than what is recommended by the project, the agency will be responsible for paying the cost differential.

FREQUENTLY ASKED QUESTIONS FOR AGENCY END USERS

This FAQ is provided to assist you with answering questions that you may receive from your co-workers and/or agency customers.

WHY IS THE CURRENT TELEPHONE SYSTEM BEING REPLACED?

In 2005, a multi-phase project called "Capitol Complex PBX Upgrade" was initiated to determine the best approach for replacing the aging voice system. (This impacts all 866- prefixes as well as a few others.) DoIT determined the best solution was to re-architect the system and implement IP-based voice solution on a converged voice and data network environment.

DOES THIS MEAN I WILL HAVE A NEW TELEPHONE NUMBER?

In most cases, your telephone number will remain the same. Employees using those few numbers that must be changed will have been notified well in advance of implementation.

HOW DOES THIS PHONE DIFFER FROM THE ONE ON MY DESK?

Although the telephone set will look different, you will make calls in much the same manner that you do today. That is, you will dial 9 to place outside calls and dial the internal 4-digit number to reach your co-workers. But you will also have new features including a history of calls made, missed and received, and a corporate directory.

WILL I RETAIN THE PHONE FEATURES I HAVE TODAY?

The new phones have the same features provided today however the terminology, the process for accessing the phones and how you use some of the features will change. The CICN project team will be working with your agency representative to determine what features you will need programmed into your phone.

WILL I RECEIVE TRAINING?

Yes, on-site training will be offered to all employees approximately one to two weeks prior to implementation. In addition, an online tutorial can be found from the CICN website at http://www.colorado.gov/dpa/doit/cicn/EndUsers/ or by specific phone model:

7911G http://www.cisco.com/comm/applications/CCNP/qlm/7911/
7941G http://www.cisco.com/comm/applications/CCNP/qlm/7941/index.htm
7961G http://www.cisco.com/comm/applications/CCNP/qlm/7961/index.htm

WILL I BE ABLE TO MAKE CALLS TO OTHER STATE EMPLOYEES WHO ARE NOT ON THIS NEW PHONE SYSTEM?

Yes.

WILL I BE ABLE TO CONTINUE WORKING AT MY DESK WHEN YOU REPLACE MY PHONE SET?

The phones will be replaced after hours – either in the evening or over weekend.

I USE A HEADSET. WILL IT WORK WITH THE NEW PHONE?

It depends on the type of headset you have. If your headset does not work, you will need to order a new one using your agency's office supply ordering procedures.

WHERE CAN I GET ADDITIONAL INFORMATION

Visit the CICN website at www.colorado.gov/dpa/doit/cicn or talk with your agency representative. If necessary, your representative will contact the CICN project team.

POST-IMPLEMENTATION END-USER SUPPORT

NOTE: This section applies only to customers who use the telephone services provided by DoIT. Agencies participating in the contract but who are not DoIT customers are responsible for developing their own support models.

After site acceptance (30 day production period), the Telecommunications Services group becomes responsible for the day-to-day support. As a customer of DoIT, there will be no support differences generally speaking, unless the problem appears to be related to the agency LAN.

Support Roles and Responsibilities

End User

An end-user who experiences a problem with his/her phone will report the problem to the DoIT Service Center (303.239-HELP) and provide all relevant information. This includes:

- Contact information (name, agency, location, etc.)
- Whether they are using a legacy or VoIP phone
- A description of the problem. For example, no dial tone, a specific feature or features no longer work, etc.
- Whether or not they are also experiencing a problem with their computer
- Whether they are aware of others having similar problems

Agency Telephone Liaison

Typically each agency has assigned a person to be the liaison between the agency and DoIT's Telecommunications Services team and is responsible for such things as:

- Submitting a Telecommunications Voice Service Order form to request and schedule Moves, Adds, and Changes (MACs) for a phone extension, phone line or voice applications (IVR, Call Centers).
- Submitting a Telecommunications Voice Service Order form for disconnects and changes to billed services.

Agency LAN Administrator

Just as they are today, the LAN administrator(s) for each agency will continue to be responsible for their LAN. Under the converged environment, the LAN administrator is also responsible for:

- Participation in site and agency equipment inventory identification and validation
- Participation in pre-implementation readiness testing
- Providing the appropriate support organization (e.g. DoIT, ISC) access to the LAN after implementation to fine tune QOS and any other performance metrics
- Collaborate and coordinate with DoIT or other support organizations when they determine through troubleshooting and diagnostics that a problem may involve the LAN

- Contacting the DoIT Service Center (303.239-HELP) to report any LAN issues they believe to be related to the implementation

DoIT Service Center

When the DoIT Service Center receives a call regarding a phone problem, the Customer Service Coordinator will:

- Open a ticket in Remedy, populate it with information collected from the customer (see above), and assign it to the appropriate DoIT functional group. For purposes of this document, assume the functional group to be Telecommunications Services.
- Tracks the trouble ticket and escalates to the next level if it is not addressed in a timely manner

DoIT Telecommunications Services

DoIT's Telecommunications Services team is responsible for:

- Administering and maintaining the telephony systems, peripheral equipment, voice applications and billing systems
- Administering and maintaining the Call Manager
- Administrating and maintaining the Cisco Emergency Responder
- Maintaining equipment and circuit inventories for billing purposes
- Administering maintenance and service contracts for telephony systems and equipment
- Responding to trouble tickets assigned to the group and processing customer MAC requests
- Collaborating with other DoIT and/or agency work groups for the purpose of troubleshooting a problem, diagnostic work, and/or resolution of system outages or issues

DoIT Network Services

DoIT's Network Services team is involved in supporting the telephony infrastructure in a variety of ways; such responsibilities include:

- Administration and maintenance of the core MNT (the state's multi-use network) and some LANs
- Maintenance of Internet gateways
- Responding to trouble tickets assigned to the group, including processing a customer MAC request
- Collaborating with other DoIT and/or agency work groups for the purpose of troubleshooting a problem, diagnostic work, and/or resolution of system outages or issues
    - Includes responding to trouble tickets reassigned from the Telecommunications Services team to the Network Services team when troubleshooting indicates the problem is network-related

ISOC/OCS

Note: Within this document, the acronym ISOC also refers to OSC (Office of Cyber Security)

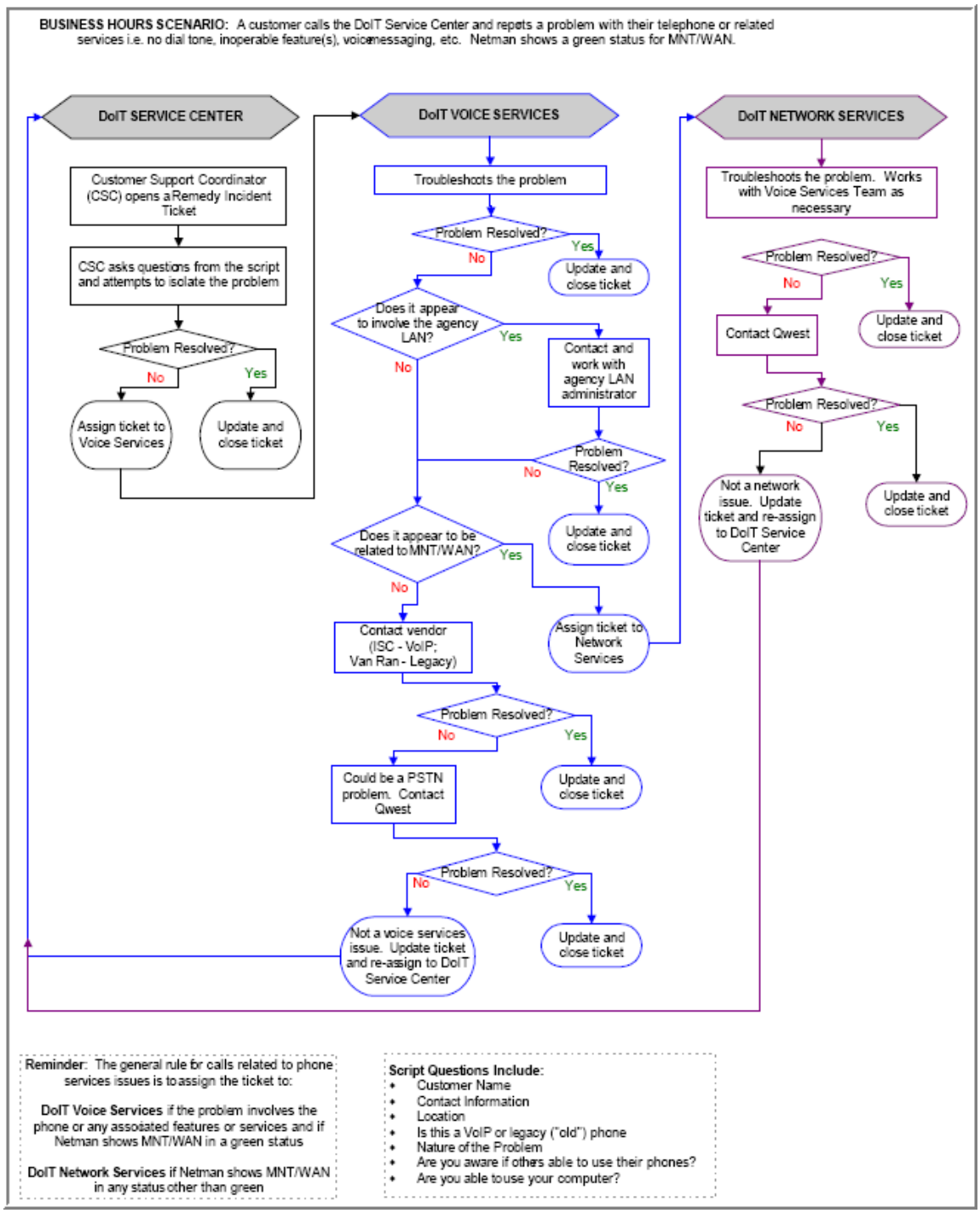
A member of ISOC is a part of the core CICN project team and is responsible for the security aspects of the system. The ISOC is also responsible for:

- Administration and maintenance of the MNT gateway firewalls
- Performing vulnerability scanning and assessments
- Providing security consulting to agencies

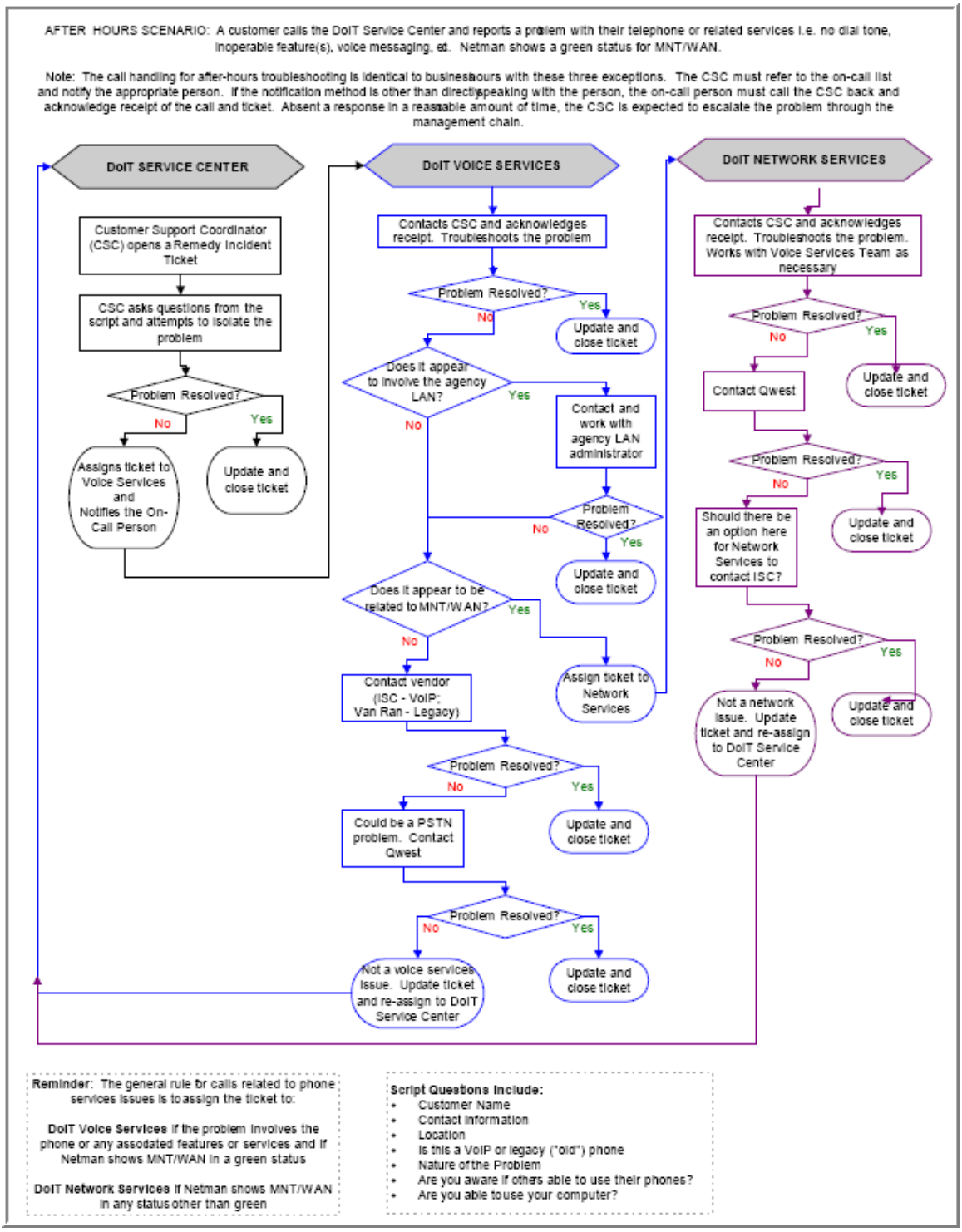
Support Flow Charts

These flow charts display the path a call may take when a DoIT voice services end-user has a problem that they believe to be related to their telephone or voice messaging system.

Business Hours



After Business Hours



GLOSSARY

BCOL	Bi-Lateral Change Order
BOM	Bill of Materials
CICN	Colorado Integrated Communications Network
DoIT	Division of Information Technologies, a division of DPA
DPA	Department of Personnel & Administration
ISOC	Colorado Information Security Office
IVR	Integrated Voice Response
LAN	Local Area Network
MAC	Moves, Adds, and Changes
MNT	Multi-Use Network
OIT	Governor's Office of Information Technology
OCS	Office of Cyber Security (referred to as ISOC in this document)
PM	Project Manager
PRF	Procurement Request Form
QOS	Quality of Service
SOW	Statement of Work
TO	Task Order
VoIP	Voice over Internet Protocol